

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of claims

1. (Currently amended) A method of conditioning a lignocellulosic substrate, the method ~~including~~ comprising the steps of:

- a) subjecting the substrate to radio frequency (RF) energy in a constrained environment having a pressure above atmospheric for a time sufficient to heat at least part of the moisture contained in the substrate to a temperature of or above the boiling point of water at ambient pressure; and
- b) reducing pressure in the constrained environment in a manner causing the moisture within the substrate to boil ~~or evaporate~~.

2. (Previously presented) A method as claimed in claim 1 wherein the RF energy is at a frequency between substantially 10 and substantially 100 MHz.

3. (Previously presented) A method as claimed in claim 2 wherein the RF energy is at a frequency between substantially 27 and substantially 40 MHz.

4. (Cancelled)

5. (Previously presented) A method as claimed in claim 4 wherein the pressure is between substantially 0.5 psi and substantially 40 psi above atmospheric.

6. (Previously presented) A method as claimed in claim 5 wherein the pressure is between substantially 3 psi and substantially 30 psi above atmospheric.

7. (Previously presented) A method as claimed in claim 6 wherein the pressure is between substantially 6 psi and substantially 25 psi above atmospheric.

Applicants : Nigel Paul Maynard *et al.*
Serial No. : 10/580,160
Filed : May 19, 2006
Page : 3 of 8

Attorney Docket No.: 65501-003US1
Client Ref. No.: SHR 504620USPR

8. (Cancelled)

9. (Previously presented) A method as claimed in claim 1 wherein the temperature achieved within the substrate is between substantially 100 and substantially 130°C.

10. (Previously Presented) A method as claimed in claim 1 wherein the pressure in the constrained environment is reduced by venting.

11. (Previously presented) A method as claimed in claim 1 wherein the pressure is reduced in step b) by applying or producing a vacuum.

12. (Previously presented) A method as claimed in clam 1 wherein the pressure is reduced in step b) by a combination of venting and applying or producing a vacuum.

13. (Cancelled)

14. (Previously presented) A method as claimed in claim 1 wherein the lignocellulosic substrate is wood.

15. (Previously presented) A method as claimed in claim 14 wherein the wood has a moisture content of more than substantially 60% based on dry weight of the wood.

16. (Previously presented) A method as claimed in claim 15 wherein the moisture content is greater than substantially 100% based on dry weight of the wood.

17. (Previously presented) A method as claimed in claim 14 wherein the wood has a moisture content of less than substantially 30% based on dry weight of the wood.

Applicants : Nigel Paul Maynard *et al.*
Serial No. : 10/580,160
Filed : May 19, 2006
Page : 4 of 8

Attorney Docket No.: 65501-003US1
Client Ref. No.: SHR 504620USPR

18. (Previously Presented) A method as claimed in claim 1 wherein the method further comprises the step of storing the substrate to allow the temperature and moisture in the substrate to equilibrate.

19. (Previously presented) A method as claimed in claim 1 wherein the lignocellulosic substrate is concurrently or subsequently impregnated with a composition.

20. (Original) A method as claimed in claim 19 wherein the composition is an aqueous solution that contains polar and/or non polar solvents, pesticidal or preservative components, and/or polymeric or pre-polymeric components.

21. (Previously Presented) A method as claimed in claim 19 wherein the composition contains a volatile pesticidal or preservative component, and/or pre-polymeric component.

22. (Currently amended) A conditioning method comprising at least the steps of:

a) subjecting a lignocellulosic substrate to radio frequency (RF) energy in a constrained environment at a pressure above atmospheric for a time sufficient to heat at least part of the moisture contained in the substrate to a temperature below the boiling point of water at ambient pressure; and

b) reducing pressure in the constrained environment by applying or producing a vacuum in a manner causing the moisture within the substrate to boil or evaporate.

23. (Currently amended) A conditioning method comprising at least the steps of:

a) subjecting a lignocellulosic substrate to radio frequency (RF) energy in a constrained environment having a pressure above atmospheric for a time sufficient to heat at least part of the moisture contained in the substrate to a temperature of or above

Applicants : Nigel Paul Maynard *et al.*
Serial No. : 10/580,160
Filed : May 19, 2006
Page : 5 of 8

Attorney Docket No.: 65501-003US1
Client Ref. No.: SHR 504620USPR

the boiling point of water at ambient pressure;

- b) incorporating into the void surrounding the substrate in the constrained environment, a composition which may impart sterilisation, preservative, or property modifying aspects; and
- c) reducing pressure in the constrained environment to allow the moisture within the substrate to boil ~~and/or evaporate~~.

24-30. (Cancelled)